# Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings of claims in the application:

### LISTING OF CLAIMS

### 1-37. (Canceled).

- 38. (Currently amended) A method to identify a test-compound that modulates chromatin remodeling of a specific DNA sequence within chromatina direct interaction between one or more subunits of a SWI/SNF chromatin remodeling complex and a nucleic acid regulatory protein DNA binding domain peptide, the method comprising:
- a)-\_\_\_\_providing one or more subunits of a SWI/SNF chromatin remodeling complex associated with a domain of and a nucleic acid regulatory protein <u>DNA</u> binding domain peptide under conditions that permit the direct interaction of the one or more subunits of the chromatin remodeling complex and the <u>DNA</u> binding domain peptide to form a multi-subunit protein complex;
- b)-\_\_\_contacting the one or more subunits of the chromatin remodeling complex associated with the domain of the nucleic acid regulator protein multi-subunit protein complex with thea test compound; and
- c)-\_\_\_\_determining whether there is an increase or decrease in the <u>direct</u> interaction between the one or more subunits of the chromatin remodeling complex and the <u>domain of the nucleic acid regulator proteinDNA binding domain peptide</u>, wherein an increase or decrease <u>indicates that identifies</u> the <u>test compound as a compound that modulates the ehromatin remodeling of a specific DNA sequence with chromatin direct interaction between the one or more subunits of the chromatin remodeling complex and the DNA binding domain peptide.</u>

- 40. (Previously presented) The method of claim 38, wherein the nucleic acid regulatory protein is a transcription factor.
- 41. (Currently amended) The method of claim 39 claim 38, wherein the DNA binding domain is a zinc-finger domain.
- 42. (Currently amended) The method of elaim 39claim 38, wherein the <u>DNA binding</u> domain is <u>a helix-turn-helix domain</u>, or <u>a helix loop helix domain</u> containing a leucine zipper motif.
- 43. (Currently amended) The method of claim 38, wherein the domain is a peptidewherein the increase or decrease in the direct interaction between the one or more subunits of the chromatin remodeling complex and the DNA binding domain peptide is determined by detecting an increase or decrease in the amount of the multi-subunit protein complex.
  - 44-45. (Canceled).
- 46. (Previously presented) The method of claim 38, wherein SWI/SNF complex is E-RC1.
- 47. (Previously presented) The method of claim 38, wherein SWI/SNF complex is BRM.
- 48. (Previously presented) The method of claim 38, wherein the chromatin remodeling complex comprises BRG1.
- 49. (Previously presented) The method of claim 38, wherein the chromatin remodeling complex comprises BAF 155.

- 50. (Currently amended) The method of claim 38, wherein the chromatin remodeling complex comprises is BAF 170.
- 51. (Previously presented) The method of claim 38, wherein the chromatin remodeling complex comprises BRG1 and BAF 155.

- 53. (Previously presented) The method of claim 38, wherein the one or more subunits of the chromatin remodeling complex are selected from the group consisting of BRG1, BRM, BAF 155, BAF 170, INil, BAF 60, BAF 47 and BAF 57.
- 54. (Currently amended) The method of claim 38-or 45, wherein the nucleic acid regulatory protein is selected from the group consisting of GATA-1, Spl, EKLF, FKLF, BKLF, GKLF, LKLF, Wilm's tumor suppressor protein (WT1), BRCA1, BRCA2, KRAB, BTB/POZ, Zif268, GLI, Xfin, a BTB/POZ domain containing zinc finger protein, PLZF (promyelocytic leukemia zinc finger), and a nuclear hormone receptor.
- 55. (Currently amended) The method of claim 41-or 91, wherein the zinc finger domain is from a nuclear hormone receptor.
- 56. (**Previously presented**) The method of claim 55, wherein the nuclear hormone receptor is selected from the group consisting of an androgen, estrogen, thyroid, progesterone, and glucocorticoid receptor.
- 57. (Currently amended) The method of claim 38 or 45, wherein the nucleic acid regulatory protein DNA binding domain peptide binds to a promoter, an enhancer, an insulator, a silencer, or locus of control regions (LCRs).

- 58. (Currently amended) The method of claim 38-or-45, wherein the one or more subunits of the chromatin remodeling complex or the <u>DNA binding</u> domain <u>peptideof a nucleic</u> acid regulatory protein is labeled with a fluorescent tag.
- 59. (Currently amended) The method of claim 38-or 45, further comprising using the test determining whether the compound in an *in vitro* chromatin remodeling or transcription assay comprising the specific DNA sequence modulates nucleosomal structure or expression of a chromatin-assembled DNA comprising a binding site for the DNA binding domain peptide.
- 60. (Currently amended) The method of claim 38-or-45, wherein the test compound is a small molecule.
- 61. (Currently amended) The method of claim 38-or 45, wherein the test compound is a peptide.

- 63. (Currently amended) A method to identify a test-compound that modulates chromatin remodeling of a specific DNA sequence within chromatin comprising:
- a)-\_\_\_\_providing chromatin assembled DNA containing thea specific DNA sequence, which specific DNA sequence comprises a binding site for a DNA binding domain peptide of a nucleic acid regulatory protein;
- b)-\_\_\_contacting the chromatin assembled DNA with one or more subunits of an SWI/SNF chromatin remodeling complex, and the DNA binding domain peptide of a-the nucleic acid regulatory protein; and
- c)-\_\_\_\_determining the level of chromatin remodeling in the presence and absence of the test compound; wherein a difference in the level of chromatin remodeling in the presence and absence of the test compound identifies the test compound as a compound that modulates chromatin remodeling of the specific DNA sequence within chromatin.

- 64. (Previously presented) The method of claim 63, wherein the specific DNA sequence is an individual gene or portion thereof, a regulatory region or a chromosomal region.
  - 65. (Canceled).
- 66. (Previously presented) The method of claim 63, wherein the nucleic acid regulatory protein is a transcription factor.
  - 67. (Canceled).
- 68. (Currently amended) The method of elaim 65 claim 63, wherein the <u>DNA binding</u> domain is a zinc-finger domain, a helix-turn-helix domain, or a helix loop helix domain containing a leucine zipper motif.
  - 69-71. (Canceled).
- 72. (Previously presented) The method of claim 63, wherein the SWI/SNF complex is E-RC1.
- 73. (Previously presented) The method of claim 63, wherein the SWI/SNF complex is BRM.
- 74. (Previously presented) The method of claim 63, wherein the chromatin remodeling complex comprises BRG1.
- 75. (Previously presented) The method of claim 63, wherein the chromatin remodeling complex comprises BAF 155.
- 76. (Previously presented) The method of claim 63, wherein the chromatin remodeling complex comprises BAF 170.

77. (Previously presented) The method of claim 63, wherein the chromatin remodeling complex comprises BRG1 and BAF 155.

- 79. (Previously presented) The method of claim 63, wherein the one or more subunits of a chromatin remodeling complex are selected from the group consisting of BRG1, BRM, BAF 155, BAF 170, INil, BAF 60, BAF 47 and BAF 57.
- 80. (Currently amended) The method of claim 63-or-71, wherein the nucleic acid regulatory protein is selected from the group consisting of GATA-l, Spl, EKLF, FKLF, BKLF, GKLF, LKLF, Wilm's tumor suppressor protein (WT1), BRCAI, BRCA2, KRAB, BTB/POZ, Zif268, GLI, Xfin, a BTB/POZ domain containing zinc finger protein, PLZF (promyelocytic leukemia zinc finger), and a nuclear hormone receptor.
- 81. (Currently amended) The method of claim 63-or 71, wherein the <u>DNA binding</u> domain is from a nuclear hormone receptor.
- 82. (Previously presented) The method of claim 81, wherein the nuclear hormone receptor is selected from the group consisting of an androgen, estrogen, thyroid, progesterone, and glucocorticoid receptor.
- 83. (Currently amended) The method of claim 63-or 71, wherein the nucleic acid regulatory protein DNA binding domain peptide binds to a promoter, an enhancer, an insulator, a silencer, or locus of control regions (LCRs).
- 84. (Currently amended) The method of claim 63-or 71, wherein the test compound is a small molecule.
- 85. (Currently amended) The method of claim 63-or 71, wherein the test compound is a peptide.

86. (Canceled).

- 87. (Currently amended) The method of claim 63-or-71, further comprising using the test compound in an *in vitro* transcription assay comprising the specific DNA sequence determining whether the compound modulates the expression of a chromatin-assembled DNA sequence comprising the specific DNA sequence.
- 88. (Currently amended) The method of claim 63-or 71, wherein the amount of chromatin remodeling is determined by assaying for DNAse hypersensitive sites within the specific DNA sequence.

89-99. (Canceled).